## **ENFORCER Video Ground Loop Isolator**

## Specifications:

Bandwidth	Video DC to 8MHz	
Maximum Input	1.0Vp-p	
Insertion Loss	<0.5dB	
Frequency Response	0-3dB at 10MHz	
Isolation Voltage	600VDC (Min)	
Insulation Resistance	100M Ohm	
Connector In	BNC Male	
Connector Out	BNC Female	
Impedance	75 ohm (BNC to BNC)	
Dimensions	2 <sup>3</sup> / <sub>16</sub> " x 1 <sup>7</sup> / <sub>32</sub> " x 1" (55 x 31 x 26 mm)	
Material	ABS Black	
Temperature	Operating temp. 32°~131° F (0°~55° C)	

**IMPORTANT:** Users and installers of this product are responsible for ensuring this product complies with all national, state, and local laws and statutes related to monitoring and recording audio and video signals. **SECO-LARM** will not be held responsible for the use of this product in violation of any current laws or statutes.

**WARNING:** Incorrect mounting which leads to exposure to rain or moisture inside the enclosure could cause a dangerous electric shock, damage the device, and void the warranty. Do not open the case of this device, as there are no field-serviceable components inside.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for a period of one (1) year from the date of sale to the original consumer customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair, or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM, and the purchaser's exclusive remedy, shall be limited to replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damages of any kind to the purchaser or anyone else.

**NOTICE:** The information and specifications printed in this manual are current at the time of publication. However, the SECO-LARM policy is one of continual development and improvement. For this reason, SECO-LARM reserves the right to change specifications without notice. SECO-LARM is also not responsible for misprints or typographical errors.

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## **Installation Manual**

# ENFORCER' VG-1C12AD

**Video Ground Loop Isolator** 





## What it is:

The ENFORCER video ground loop isolator is a passive device that helps to reduce ground loop interference caused by a difference in ground potential typically caused by multiple building grounds and differences in ground potential. Ground loop isolators can be installed in new installations or added to existing installations.

Video ground loop isolators should be installed on the camera side of your cable and can be used with standard BNC coax cable or with video baluns over UTP.

## Features:

- Built-in surge suppressor.
- Gold-plated BNC connector improves reliability and product life.
- Passive operation No external power required.
- High immunity from interference Built-in impedance coupled device and noise filter. Helps to reduce RF interference, cross talk, picture tearing, and other picture quality problems.
- BNC terminals for easy installation.
- Small size, only  $2^{3}/_{16}$ " x  $1^{7}/_{32}$ " x 1" (55 x 31 x 26 mm).

## **ENFORCER Video Ground Loop Isolator**

#### Installation:

Installation for ground loop isolators is very simple. The units are mounted in-line with the video signal. To install, refer to figures 1 and 2:

- 1. Detach the video cable BNC connector from the camera BNC connector.
- 2. Attach the input side of the VG-1C12AQ to the camera BNC connector.
- 3. Attach the video cable BNC connector to the output side of the VG-1C12AQ.

Figure 1:

## Typical Installation #1: VG-1C12AQ

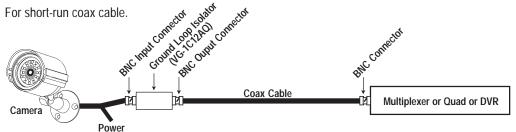
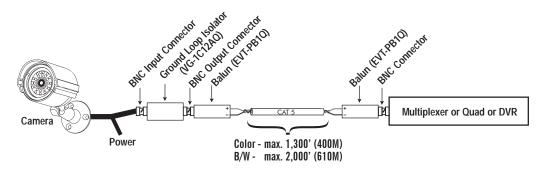


Figure 2:

## **Typical Installation #2:**

## VG-1C12AQ + EVT-PB1Q

For longer runs using CAT5 UTP cable.



## **ENFORCER Video Ground Loop Isolator**

## **Trouble Shooting:**

Problem	Possible Cause	Possible Solution
Wavy or ghost image if connected to image processor (e.g., multiplexer or DVR), but not if directly to monitor?	a. Strong electromagnetic interference.     b. Poor signal, or balun separation is too long.     c. Split pairs.     d. Crimped cable.	a. Move the cable away from possible sources of interference.     b. Replace with Active Balun.     c. Ensure same twisted pair connects to balun at both ends of cable.     d. Replace cable with new cable.
Image background flutters between dark and light.	Interference from external power source.	Remove power source, or adjust monitor's brightness and contrast.
Image is wavy and shakes?	Twisted pair wires reversed.	Try reversing polarity of the 2 wires at one end of cable.
Image is weak or faded?	a. Exceeded recommended balun separation.     b. Using lower-grade cable than recommended.	a. Reduce cable length.     b. Replace with a higher-grade cable. CAT5 cable meets specifications in the manual. CAT6 cable allows longer range.
No image?	a. Cable is incorrectly connected.     b. Cable was accidentally cut.     c. Defective camera or remote video device.     d. Defective video balun.	a. Double-check that the cable was connected properly. b. Run a continuity test on all wires in the cable. c. Replace the unit with a new unit. d. Replace the unit with a new unit.

#### Also Available:

## Video Balun with Ground Loop Isolator **EVT-PB1-V1TGQ**

where no passive video baluns have been installed yet.

